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Angle-resolved photoemission study of heavy-fermion cerium compounds $CeRhIn_5$ and $CeIrIn_5$

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Recently, two new ternary Ce-based heavy-fermion compounds $CeRhIn_5$ and $CeIrIn_5$ were synthesized. Both of them have tetragonal $HoCoGa_5$ structure, and their electronic structures are considered to be quasi-two-dimensional. Especially, it is reported that $CeRhIn_5$ is a pressure-induced superconductor*. In the present study, the electronic states of these two compounds are investigated by high-resolution angle-resolved photoelectron spectroscopy. The results are compared with the results of the FLAPW band structure calculations.

*H. Hagger *et al.*, Phys. Rev. Lett. **84**, 4986 (2000).